

Figure 1

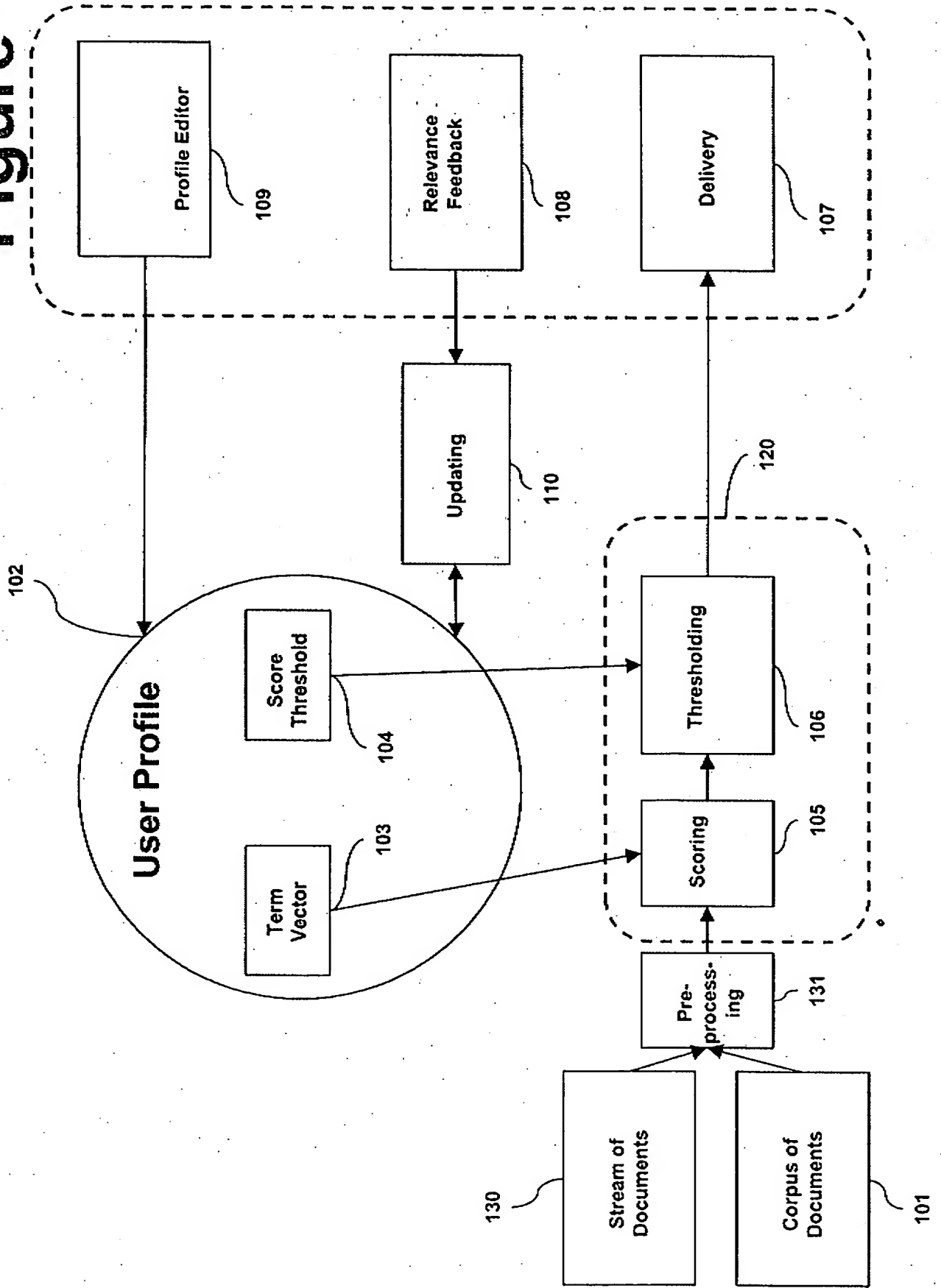


Figure 2(a)

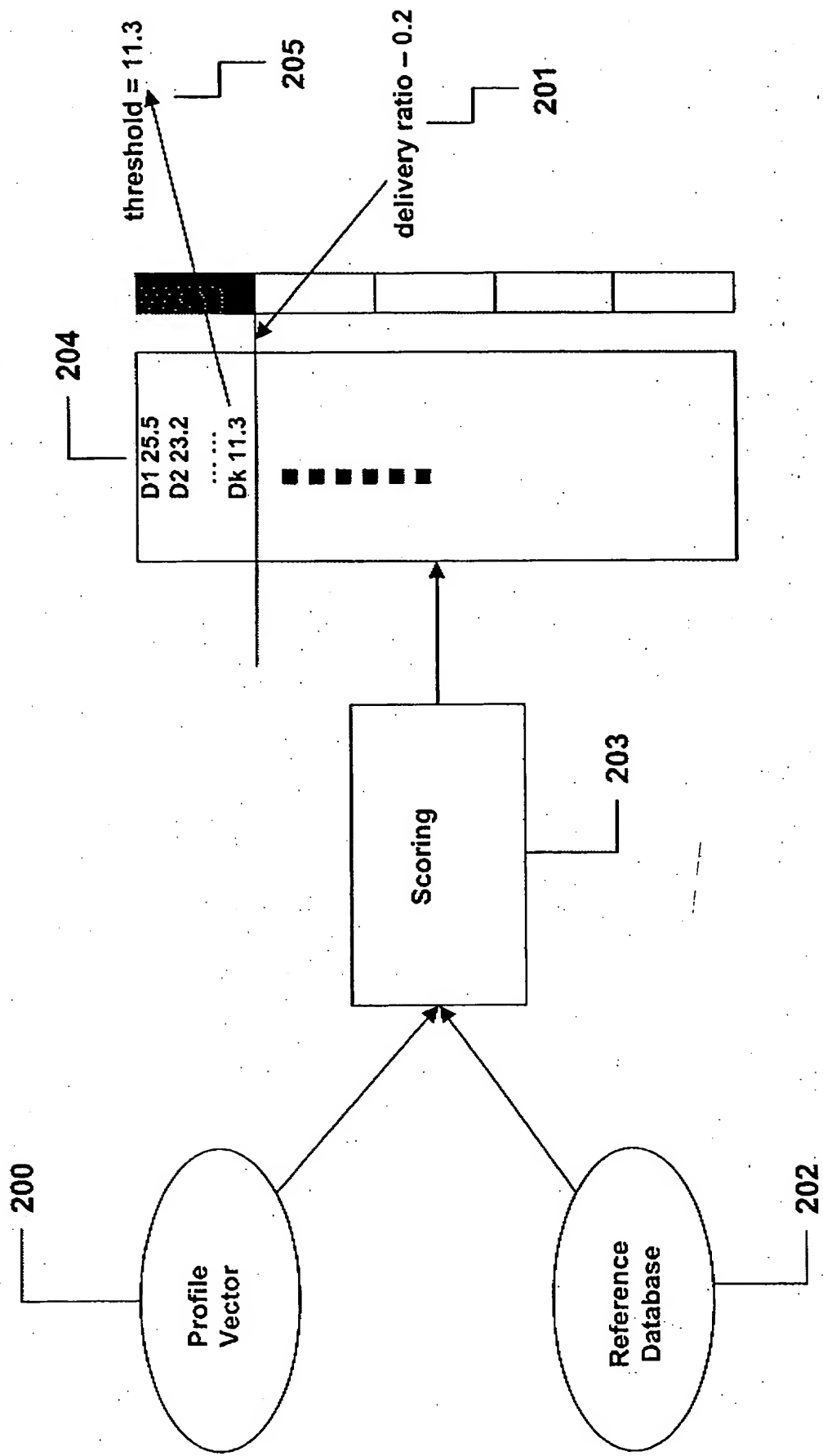


Figure 2(b)

Doc1	99.7	R	$U = 3 \times 1 - 2 \times 0 = 3$
Doc2	97.6	R	$U = 3 \times 2 - 2 \times 0 = 6$
Doc3	90.1	N	$U = 3 \times 2 - 2 \times 1 = 4$
Doc4	88.7	R	$U = 3 \times 3 - 2 \times 1 = 7$
Doc5	83.1	N	$U = 3 \times 3 - 2 \times 2 = 5$
Doc6	81.1	N	$U = 3 \times 3 - 2 \times 3 = 3$
Doc7	76.2	N	$U = 3 \times 3 - 2 \times 4 = 1$
Doc8	64.5	N	$U = 3 \times 3 - 2 \times 5 = -1$
Doc9	55.9	N	$U = 3 \times 3 - 2 \times 6 = -3$

250 260 270 280

291 θ_{opt} 292 θ_{zero}

Figure 3

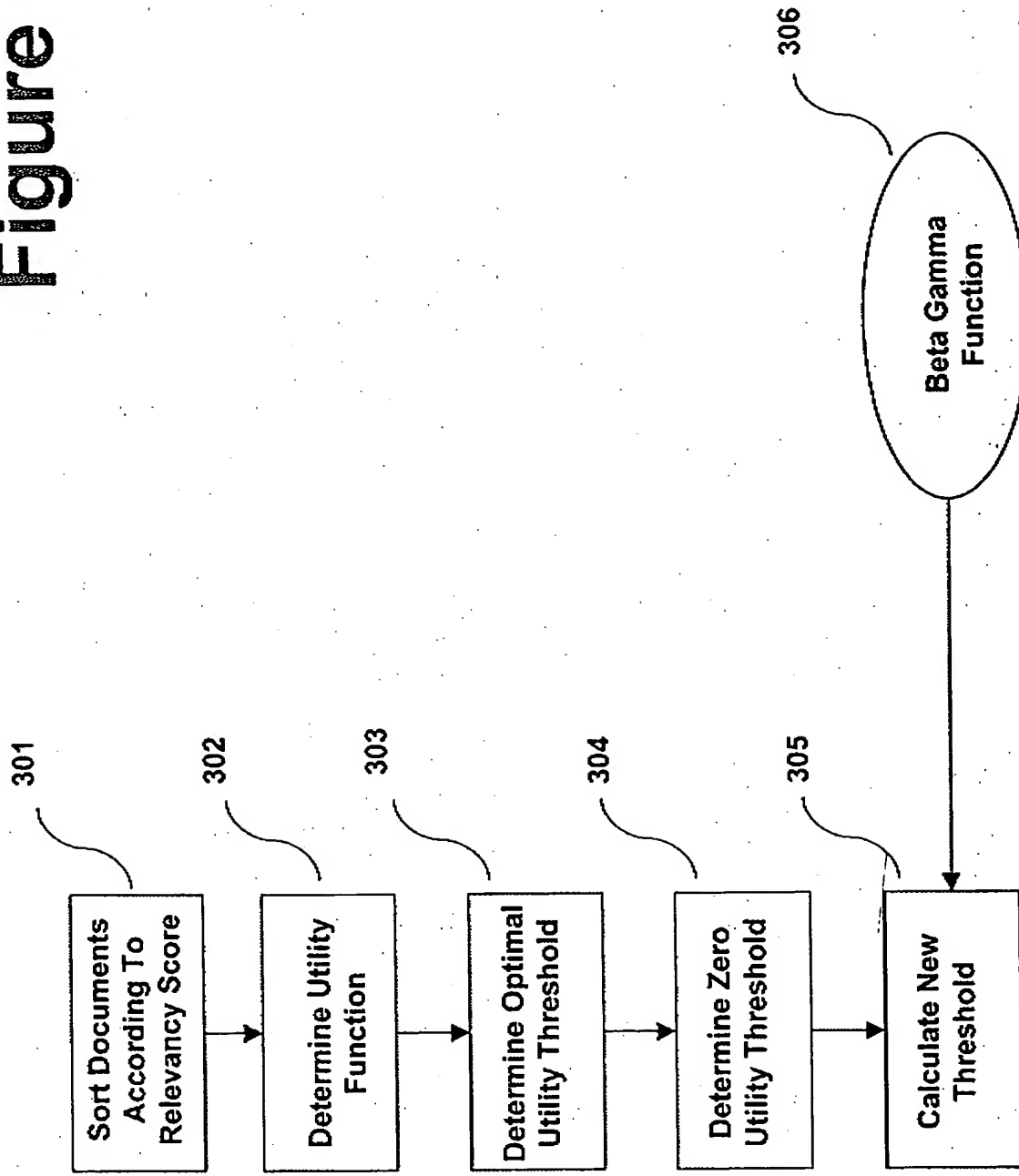
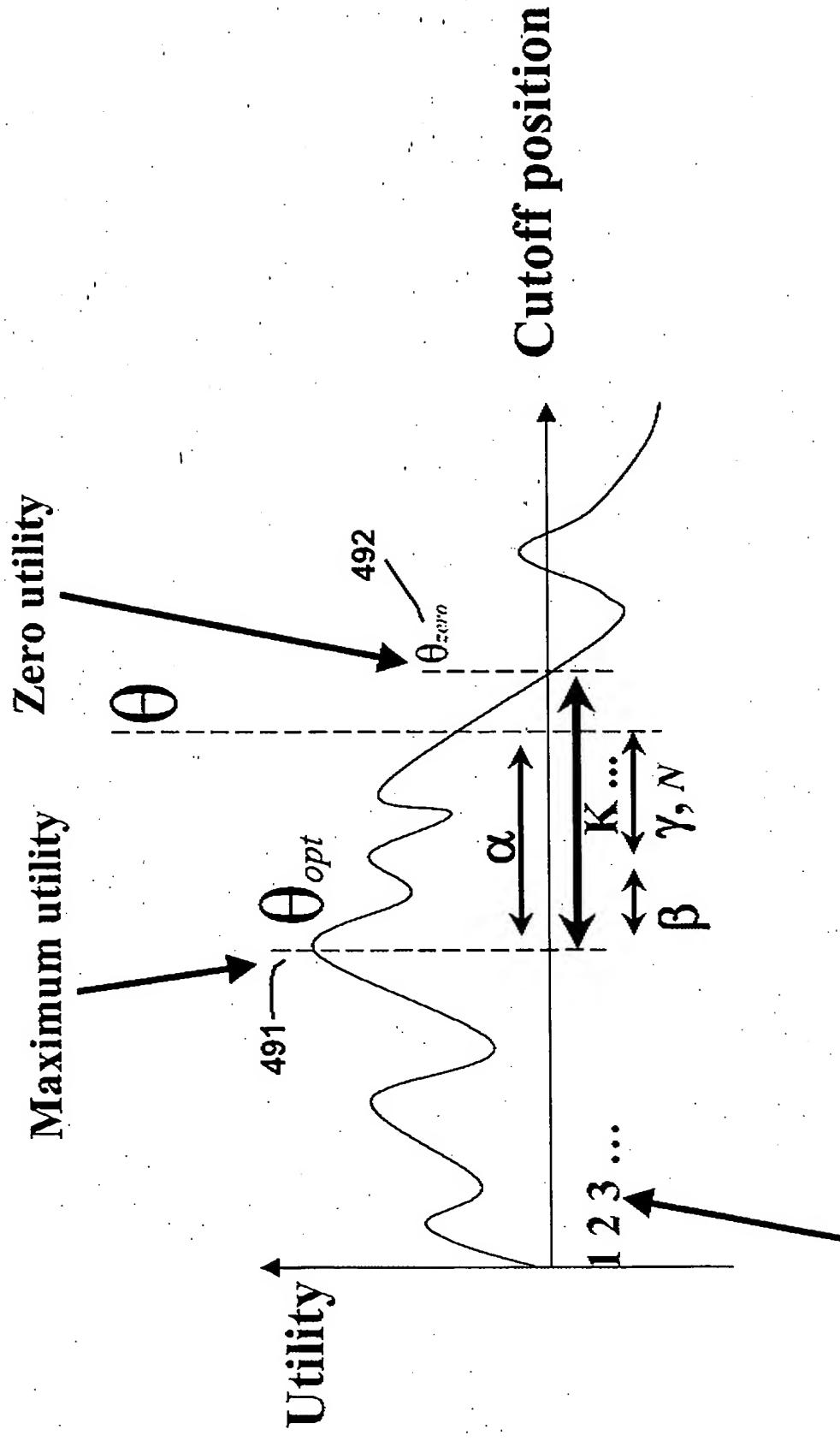


Figure 4



A Ranked list of documents
returned for a profile

Figure 5(a)

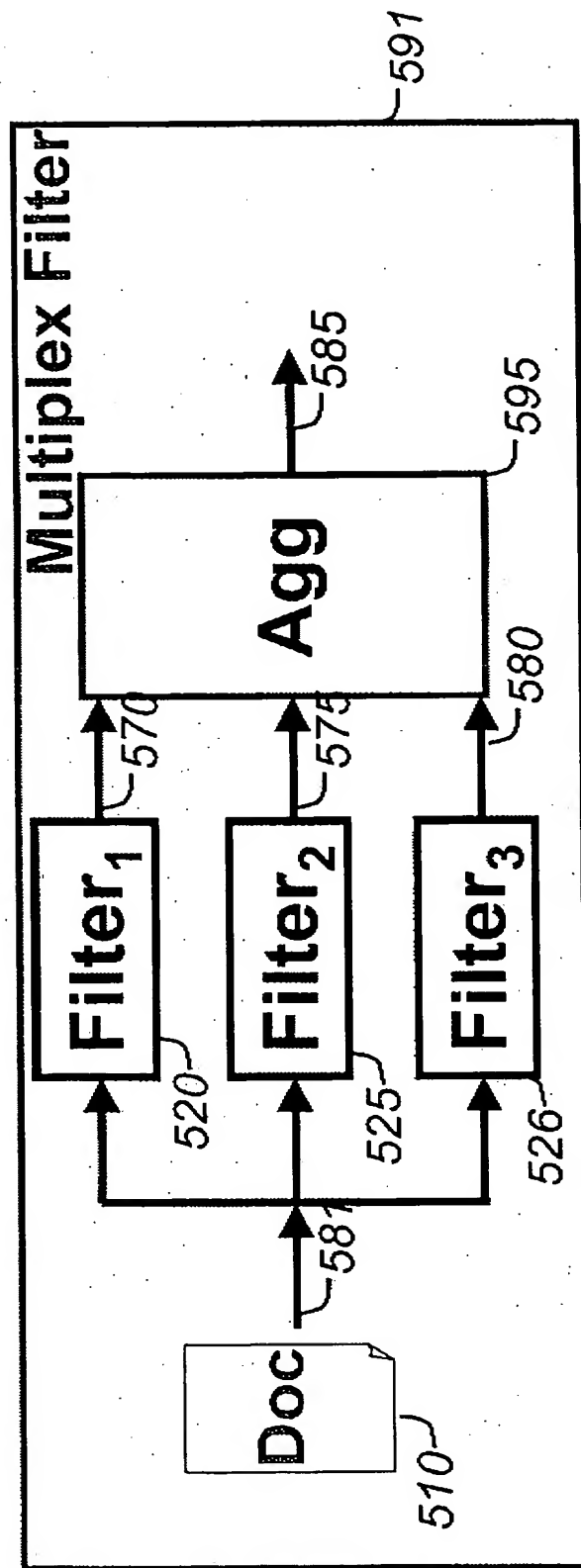


Figure 5(b)

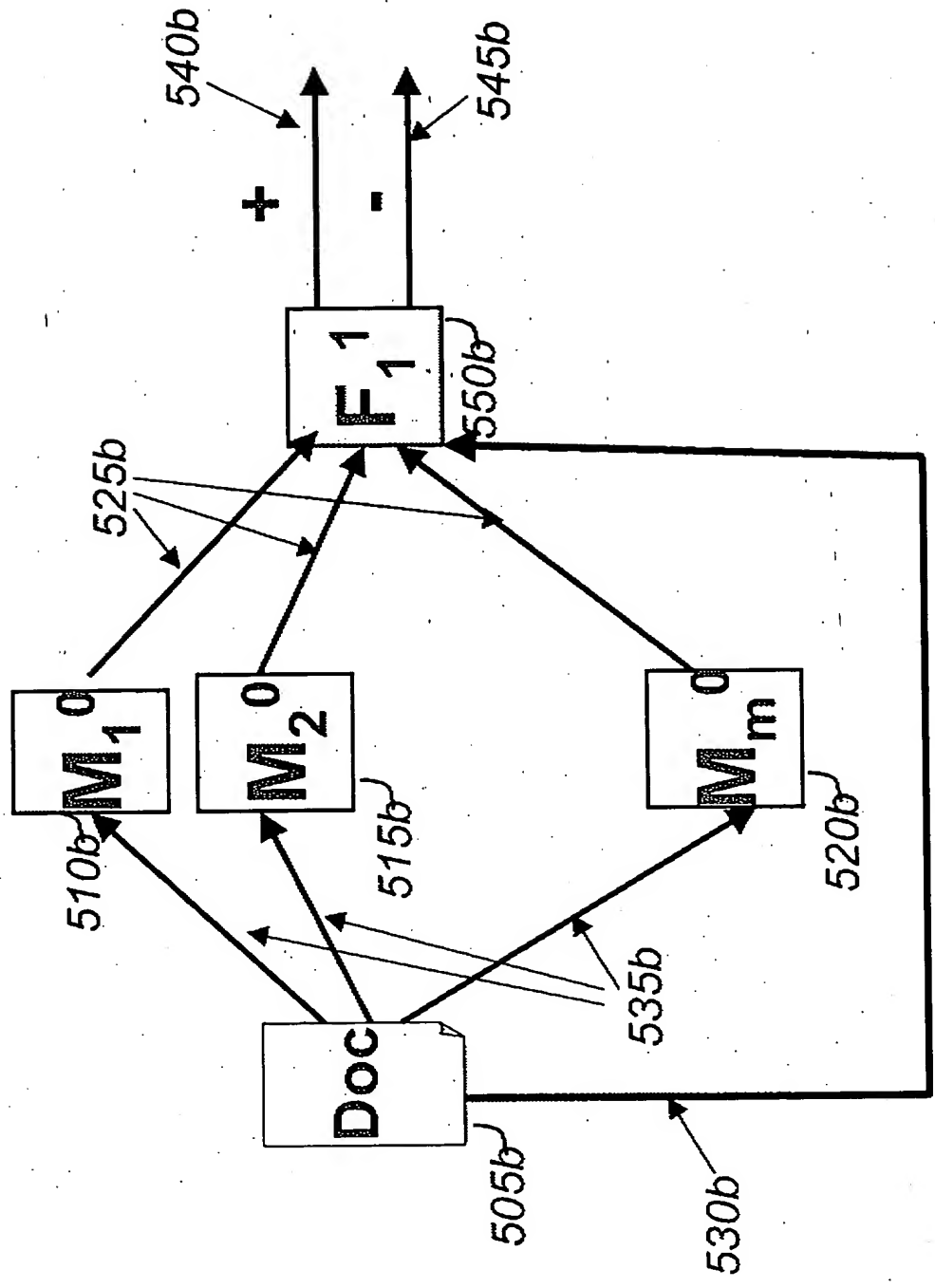


Figure 5(d)

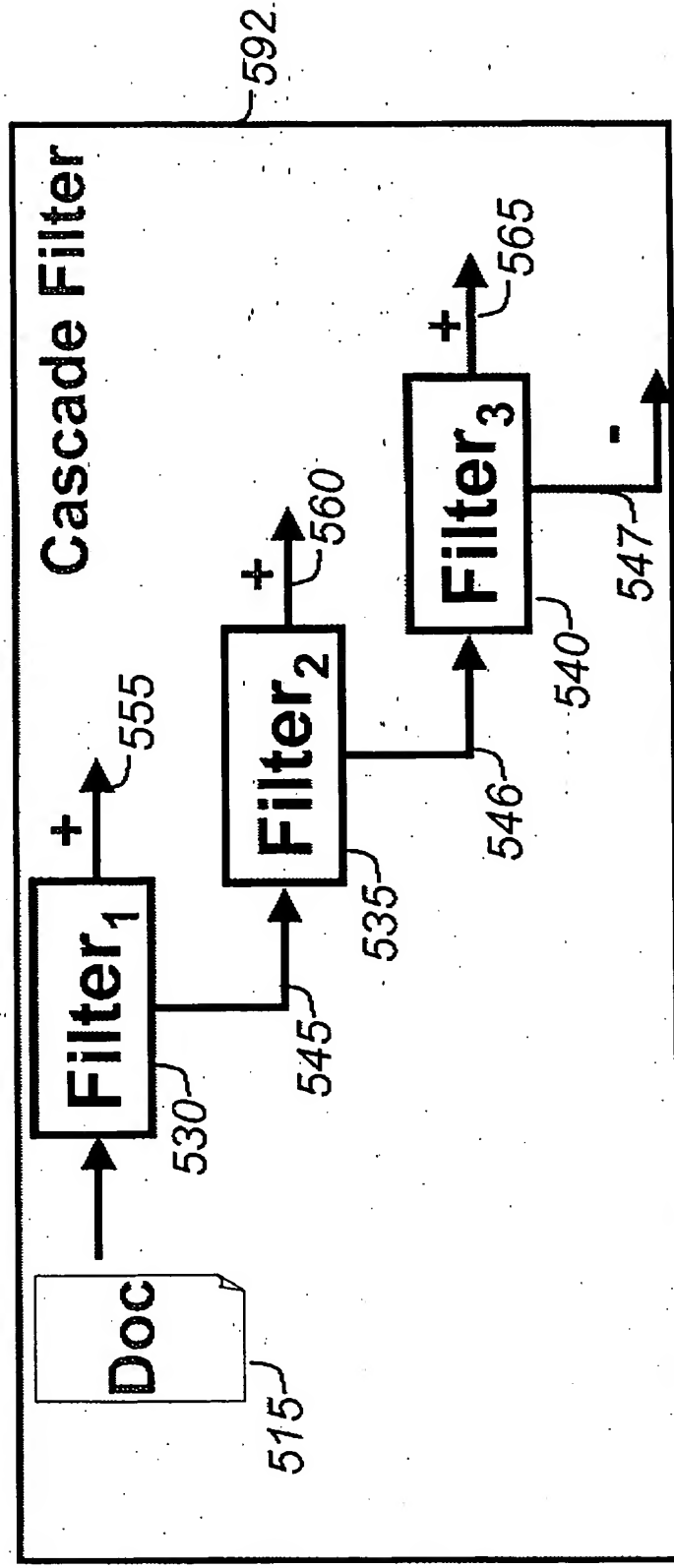


Figure 5(e)

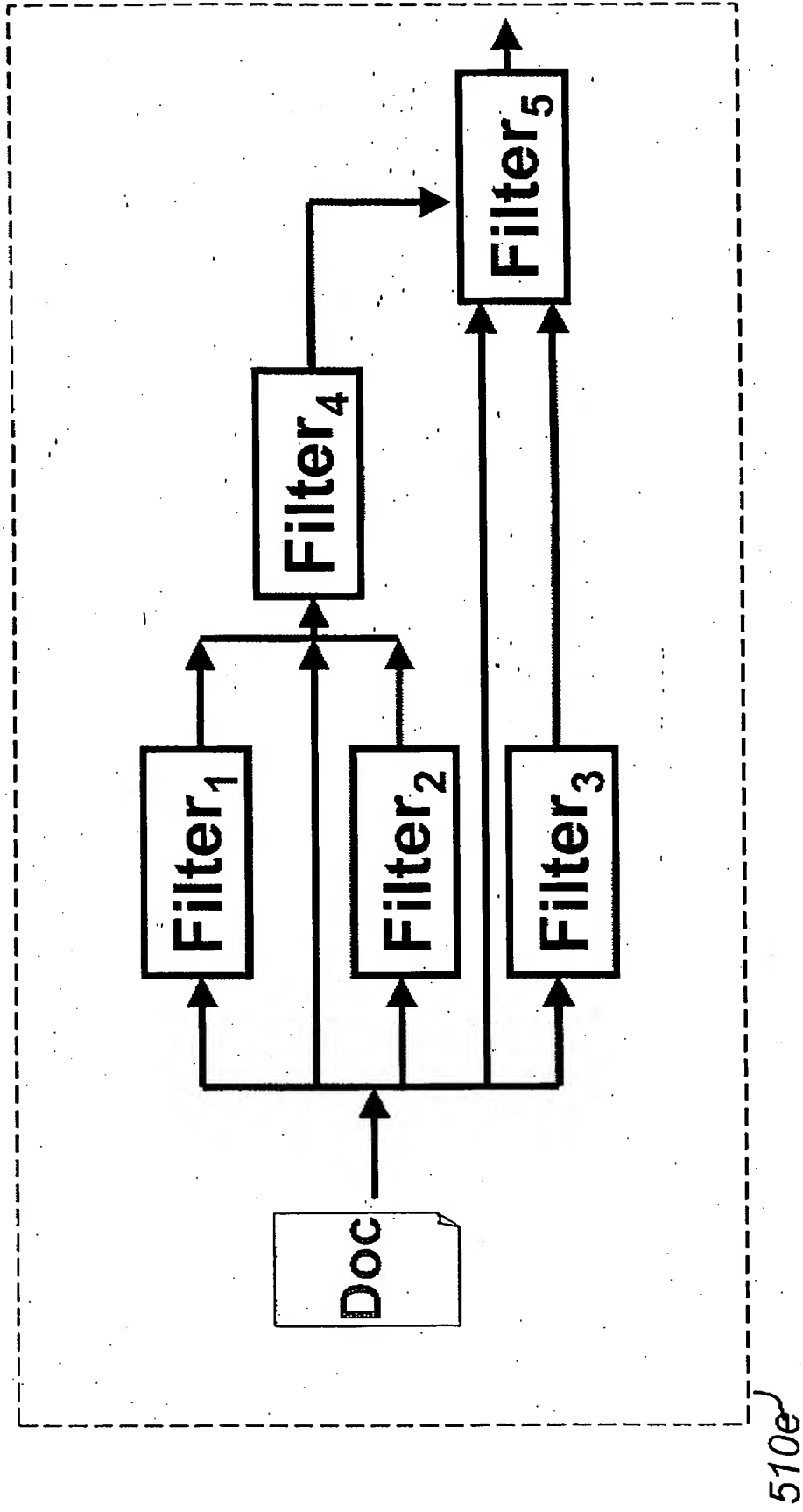


Figure 6

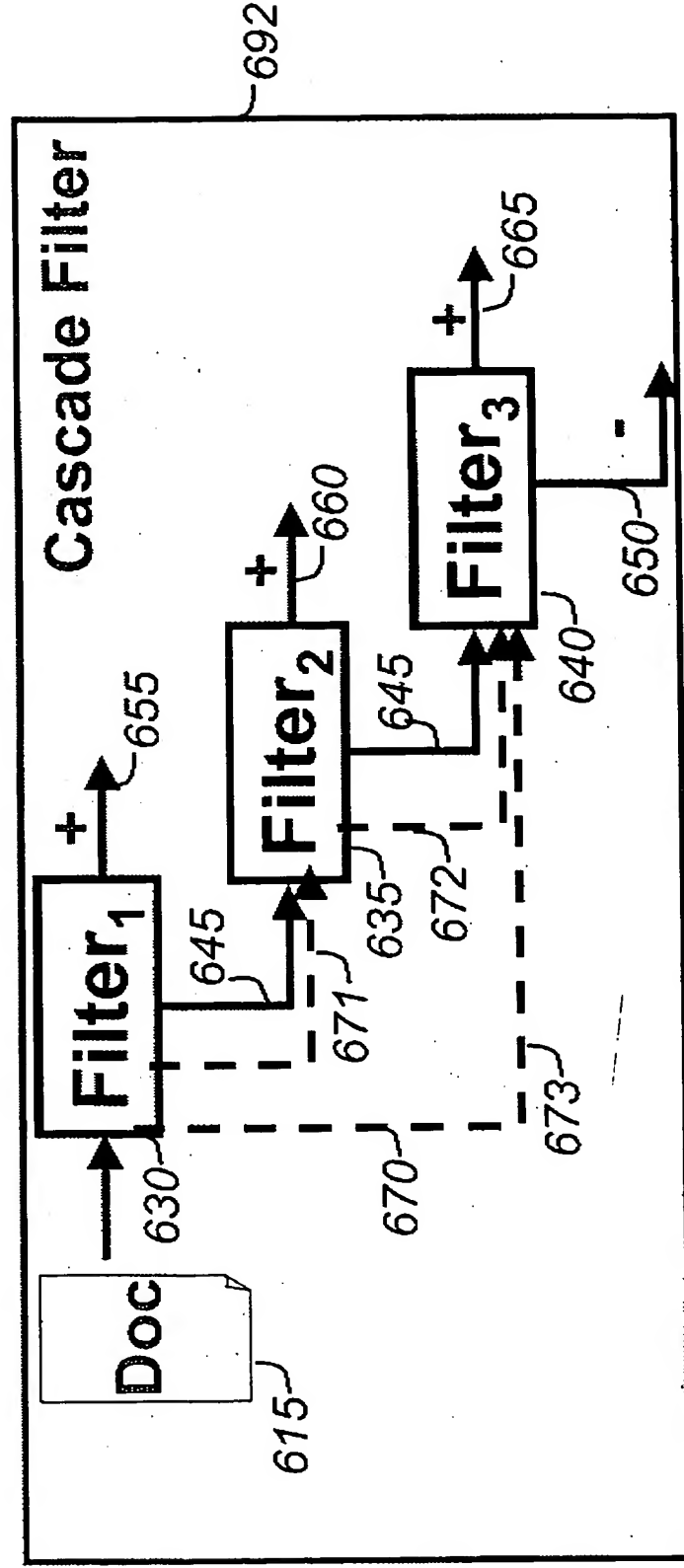


Figure 7

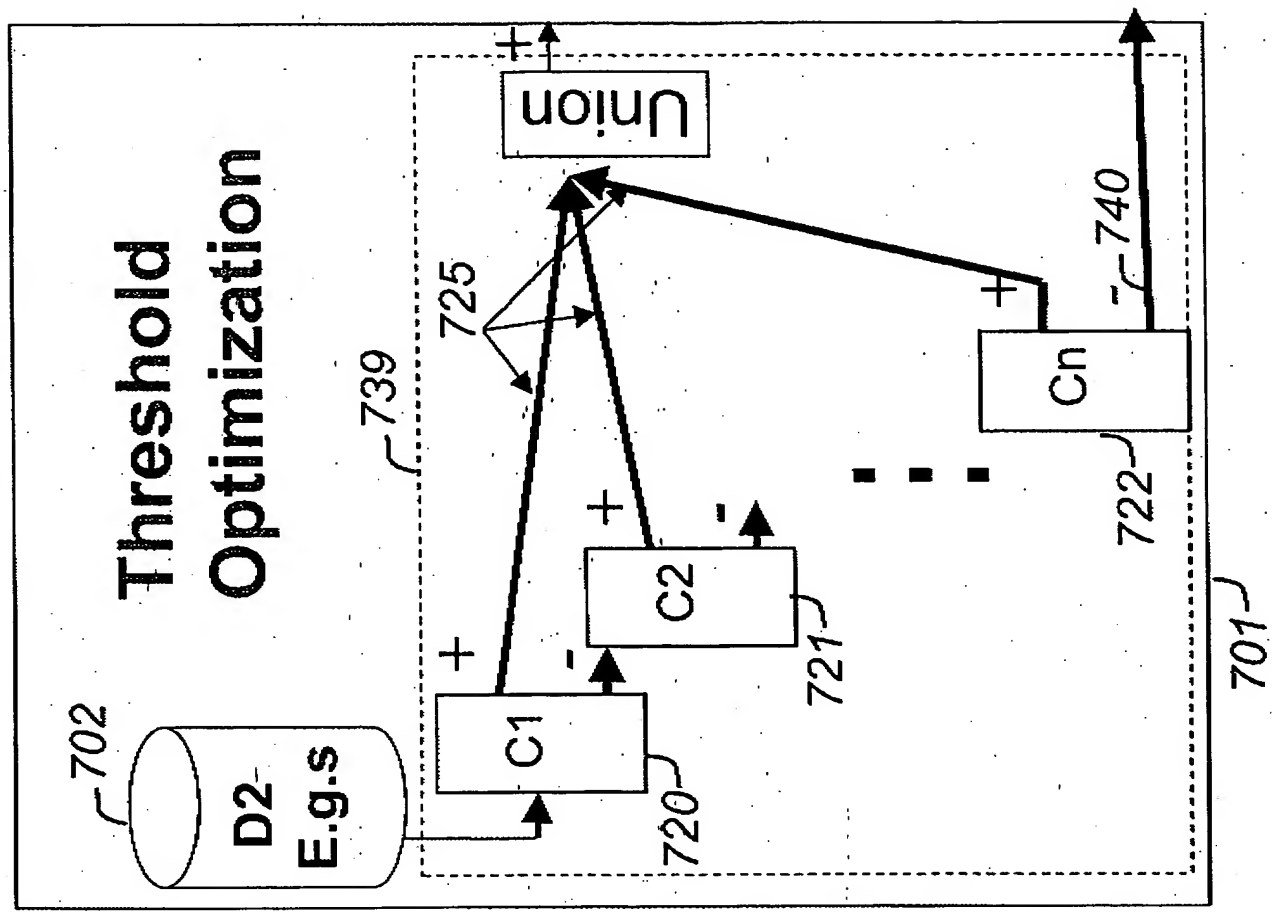
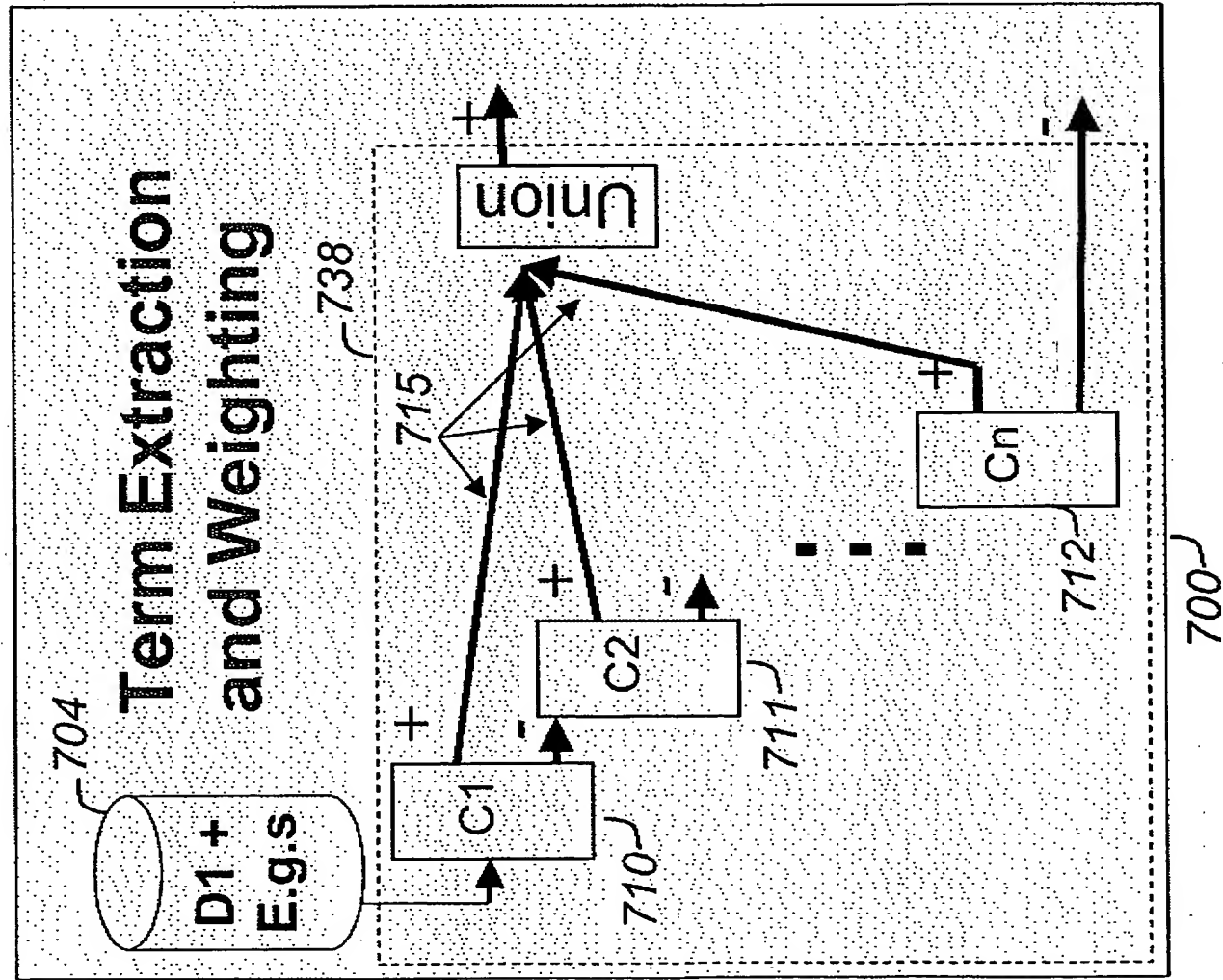
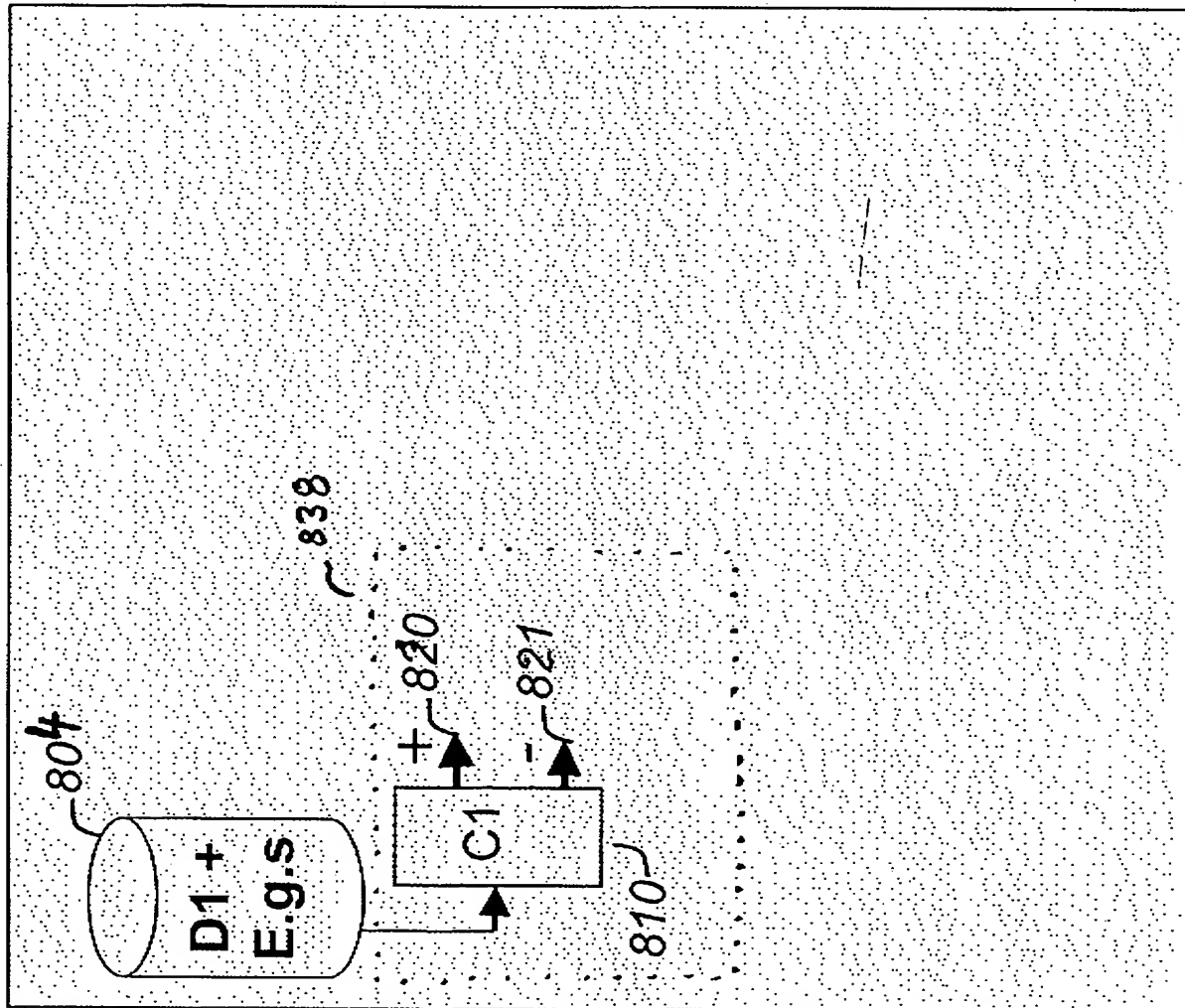
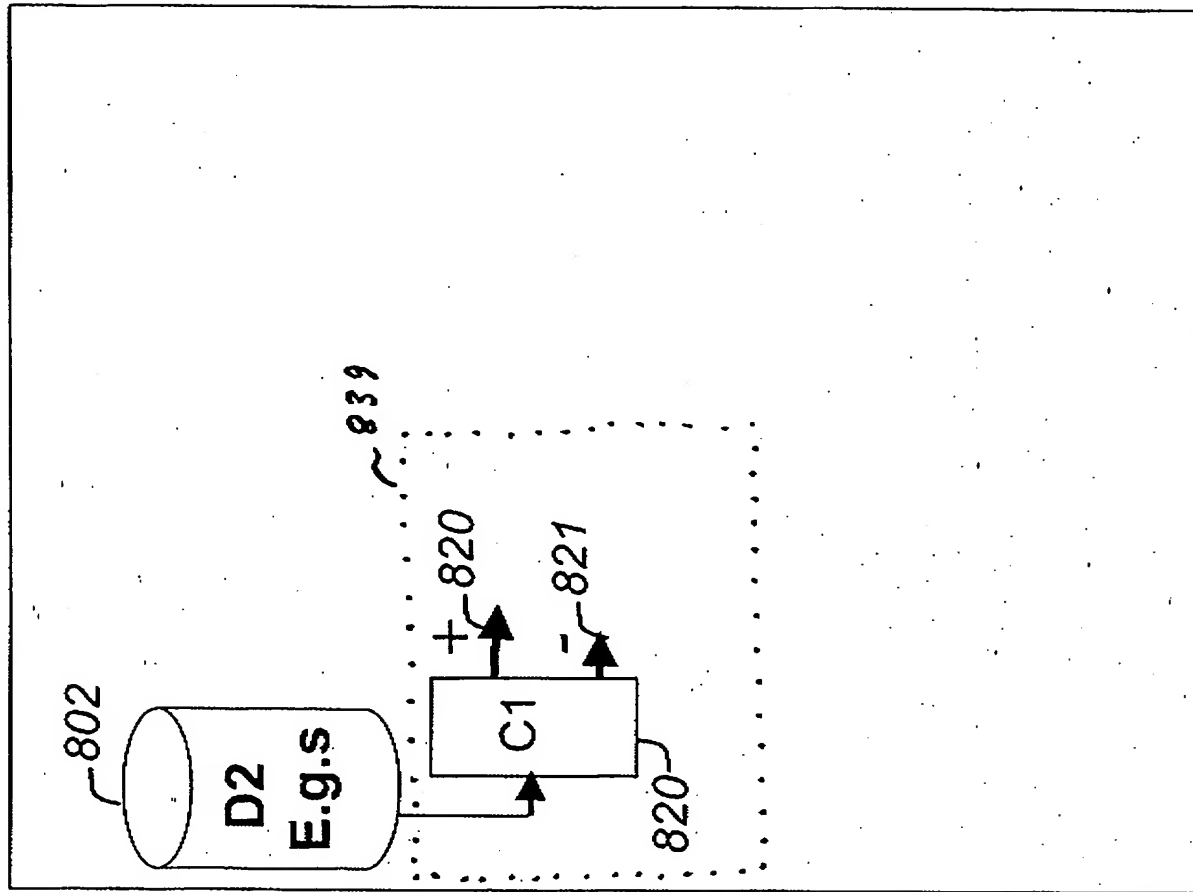


Figure 8

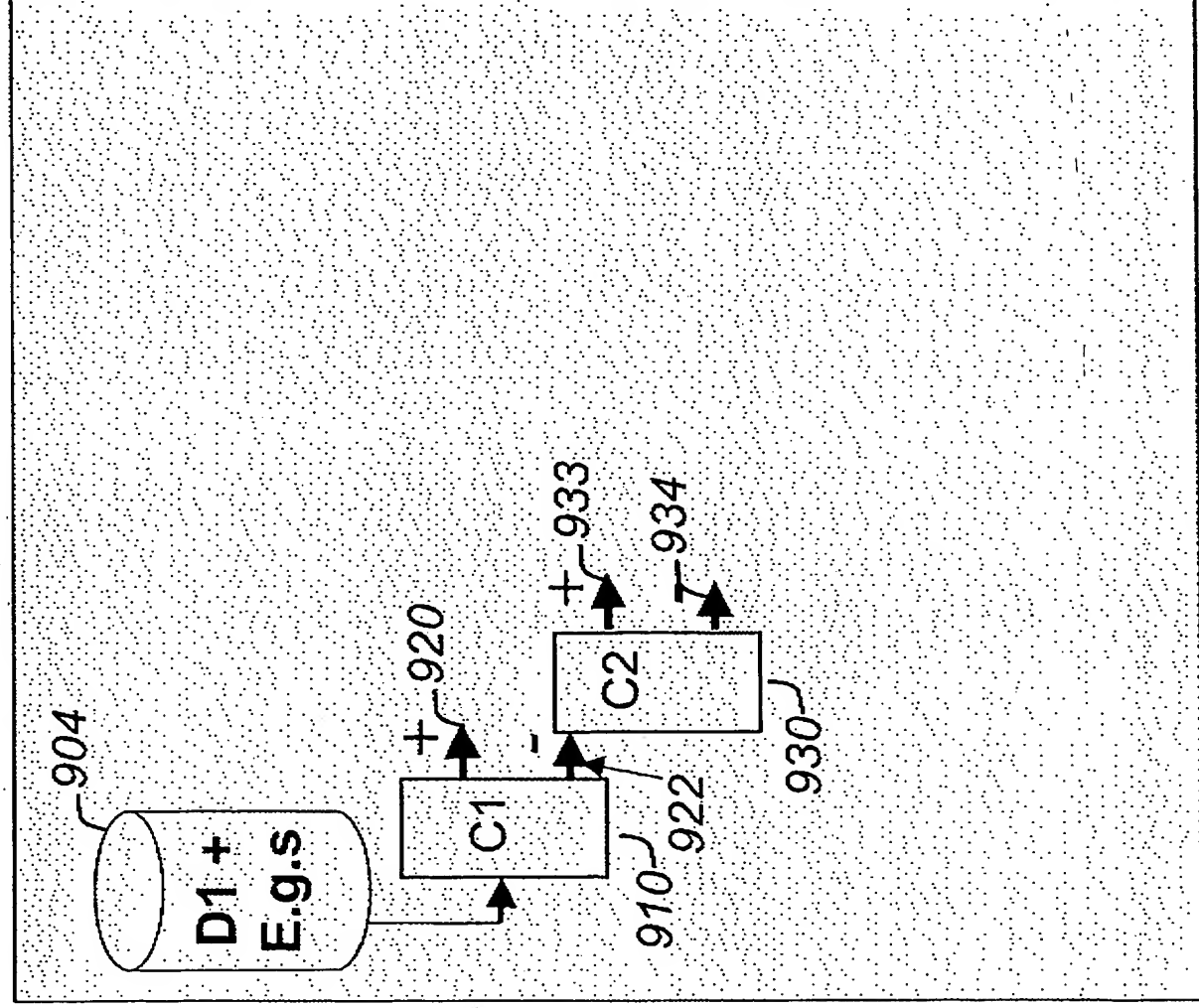


800

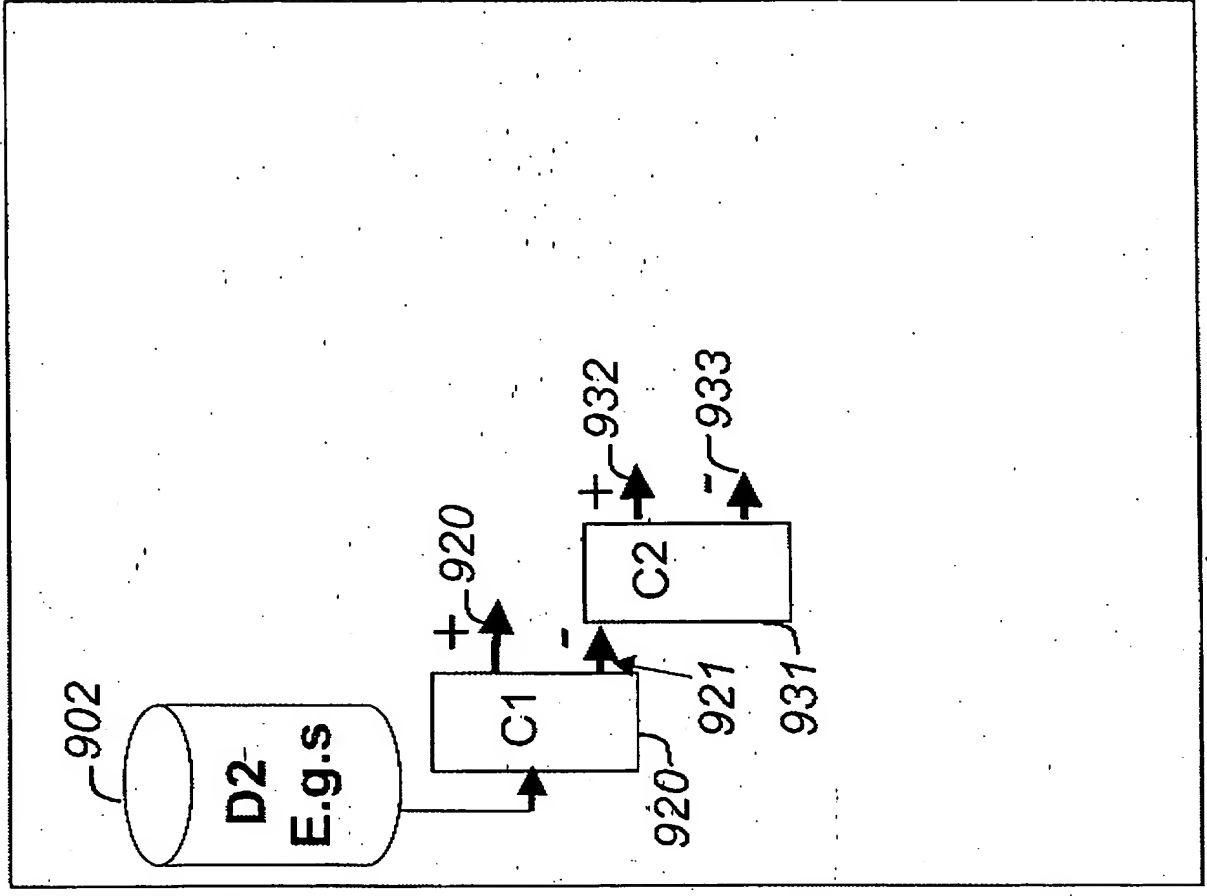


801

Figure 9



900



901

Figure 10

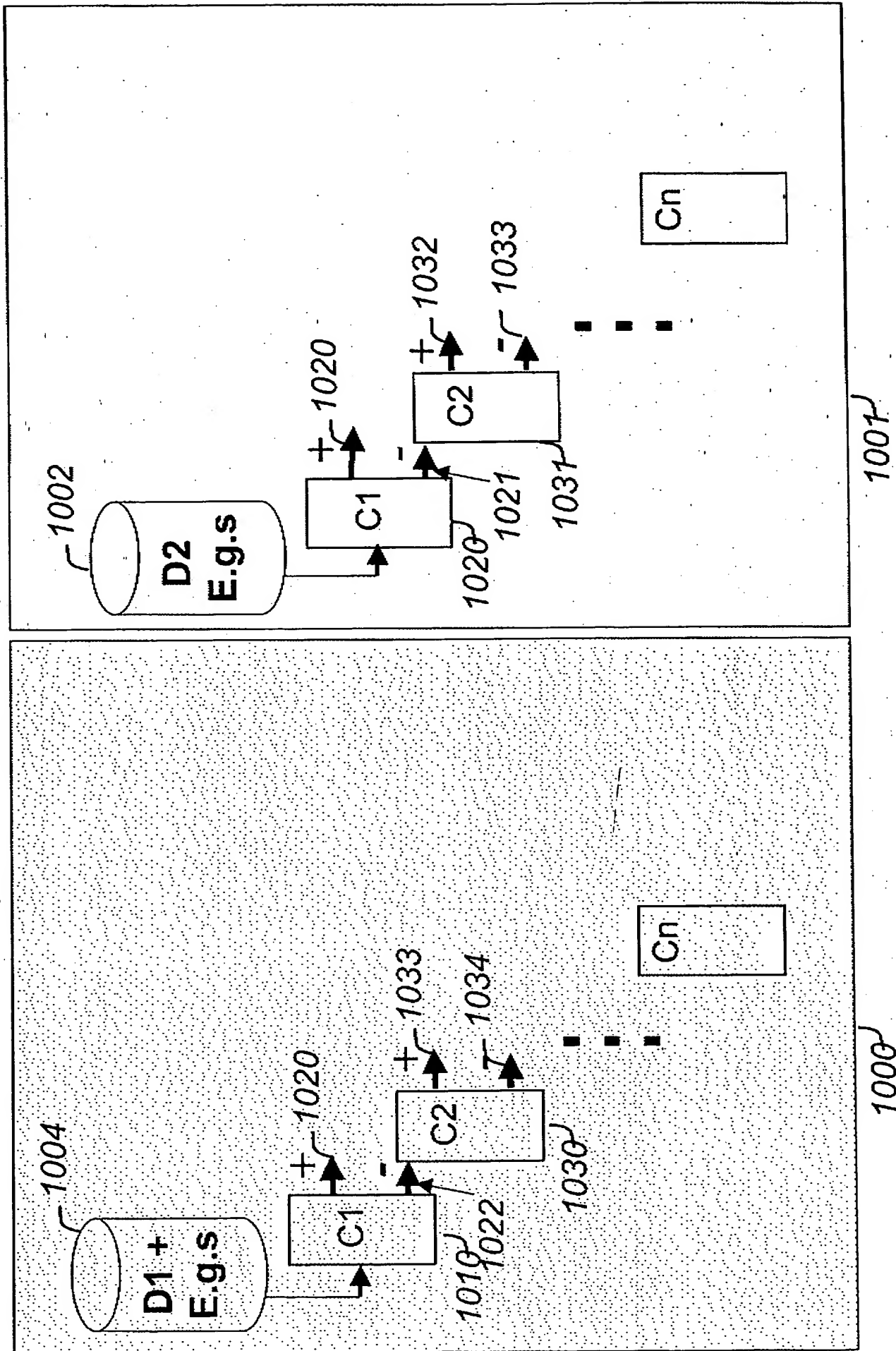


Figure 11

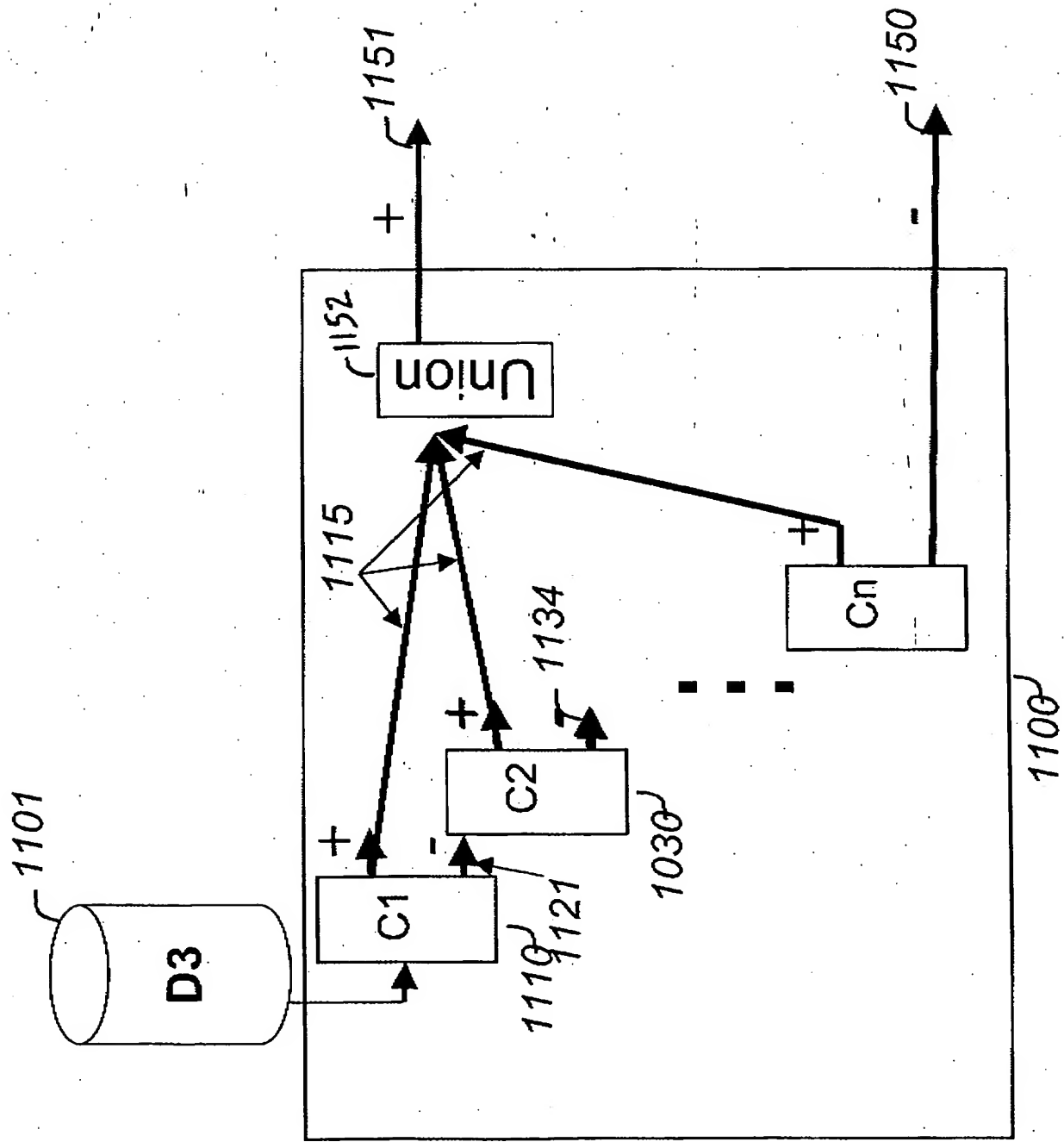


Figure 12a

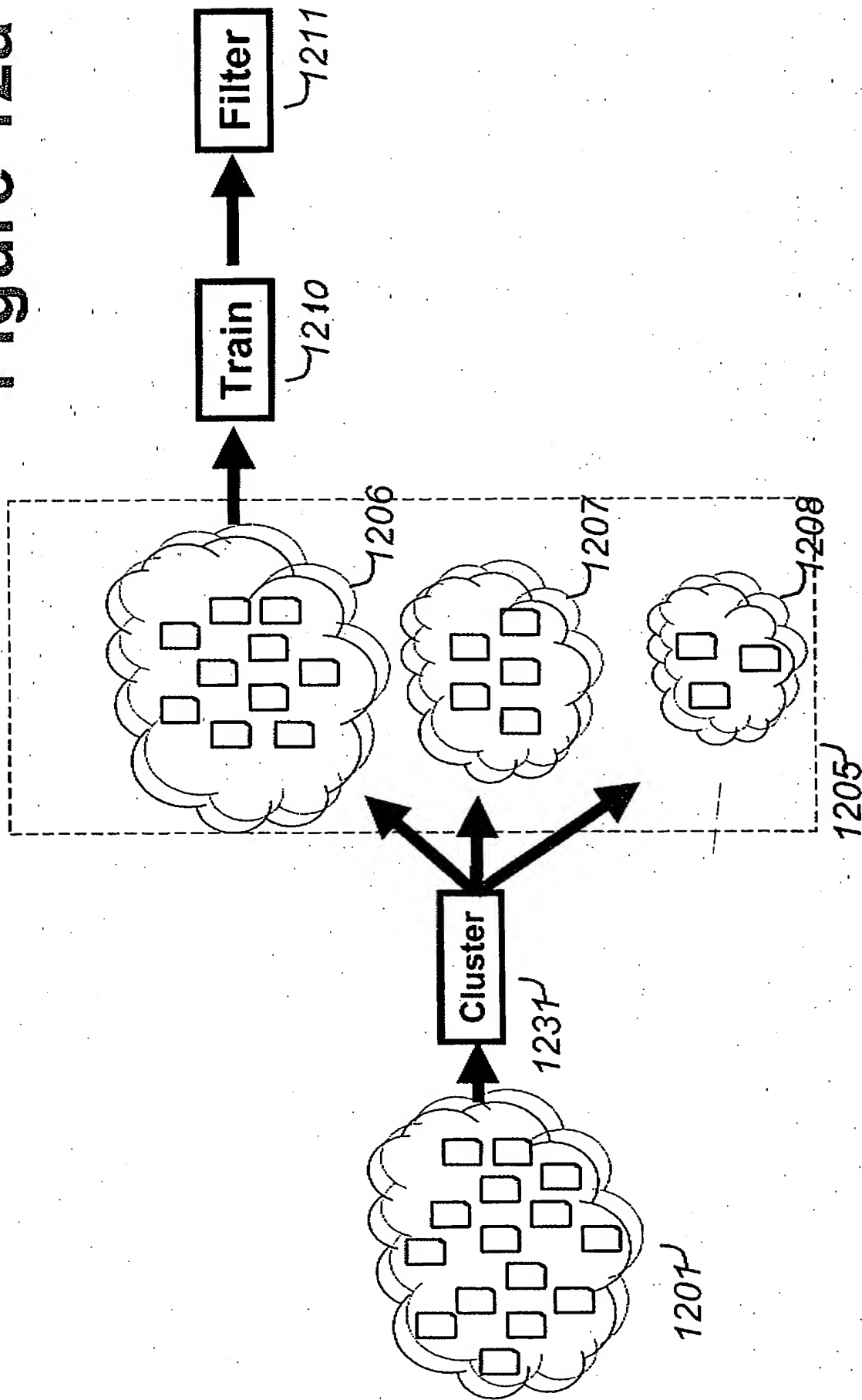


Figure 12b

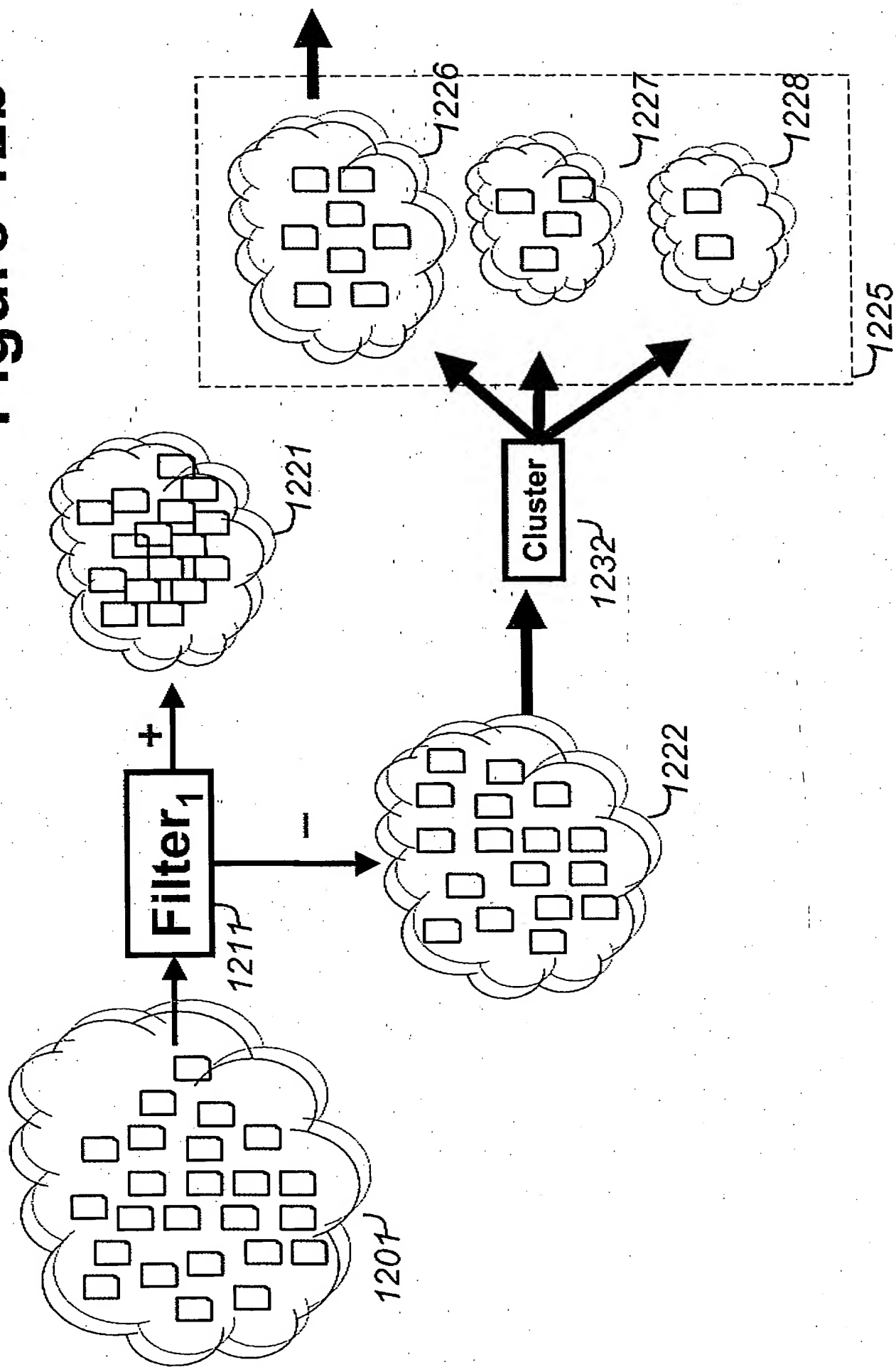


Figure 12c

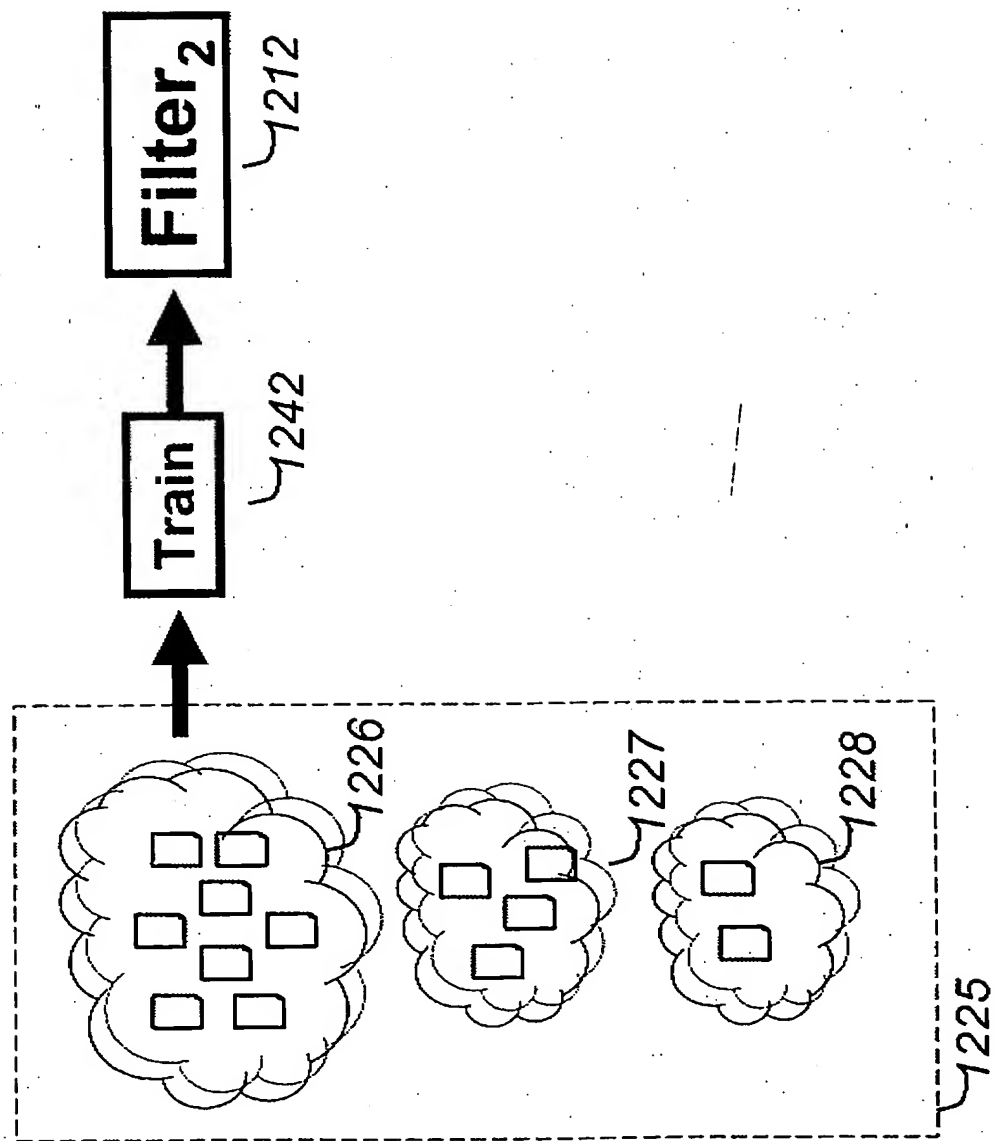


Figure 12d

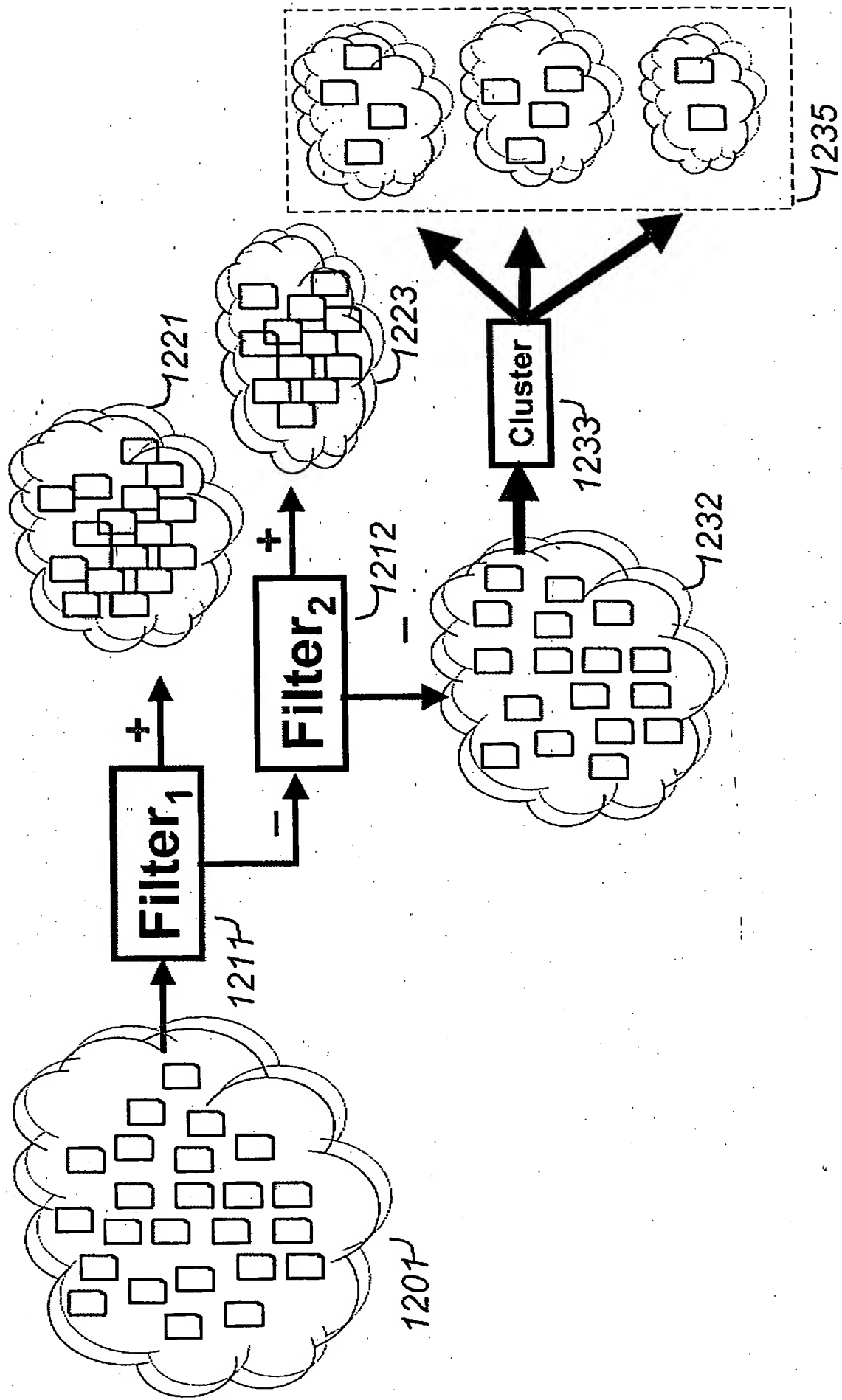


Figure 13

